



United States  
Department of  
Agriculture

Forest  
Service

Manti-La Sal  
National Forest

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Date: November 18, 2014

M103710026  
Mike

DIV. OF OIL, GAS & MINING

Dear Interested Party:

A letter was previously mailed to you on September 23, 2014 concerning the completion of the La Sal Mines Complex Environmental Assessment (EA) and the draft Decision Notice and Finding of No Significant Impact (DN/FONSI). A second letter was sent on October 30, 2014 cancelling the administrative review that began with a 9/25/14 notice in the Sun Advocate due to posting of an incorrect version of the final EA. The correct Final La Sal Mines Complex EA is available for your review on the website: <http://www.fs.usda.gov/projects/mantilasal/landmanagement/projects>.

The draft DN/FONSI did not change from the one previously sent to you but an additional copy is included for your information and review. Those desiring a hard copy of the EA can receive a copy by contacting: Michael Diem, District Ranger, Moab/Monticello District, P.O. Box 820, Monticello, UT 84535 (435-587-2041); Greg Montgomery (435-587-2041); or Joel Nowak via email ([joelnowak@fs.fed.us](mailto:joelnowak@fs.fed.us)).

As stated in the previous letter, the proposed project is subject to the objection process pursuant to 36 CFR 218 Subparts A and B. A new 45-day objection period will begin following the publication date of a legal notice in the Sun Advocate, newspaper of record. It is the exclusive means for calculating the time to file an objection of this project. Those who previously filed an objection based on the September 25, 2014 publication in the Sun Advocate, should resubmit their objection, if desired, following review of the final EA and Draft DN/FONSI.

### Eligibility to File Objections

Objections will be accepted only from those who have previously submitted specific written comments regarding the proposed project either during scoping or other designated opportunity for public comment in accordance with § 218.5(a). Issues raised in objections must be based on previously submitted timely, specific written comments regarding the proposed project unless based on new information arising after designated opportunities.

Individual members of organizations must have submitted their own comments to meet the requirements of eligibility as an individual, objections received on behalf of an organization are considered as those of the organization only. If an objection is submitted on behalf of a number of individuals or organizations, each individual or organization listed must meet the eligibility requirement of having previously submitted comments on the project (§ 218.7). Names and addresses of objectors will become part of the public record.

### Contents of an Objection

Incorporation of documents by reference in the objection is permitted only as provided for at § 218.8(b). Minimum content requirements of an objection are identified in § 218.8(d) and include:

- Objector's name and address with a telephone number if available; with signature or other verification of authorship supplied upon request;





- Identification of the lead objector when multiple names are listed, along with verification upon request;
- Name of project, name and title of the responsible official, national forest/ranger district of project, and
- Sufficient narrative description of those aspects of the proposed project objected to, specific issues related to the project, how environmental law, regulation, or policy would be violated, and suggested remedies, which would resolve the objection.
- Statement demonstrating the connection between prior specific written comments on this project and the content of the objection, unless the objection issue arose after the designated opportunity(ies) for comment.

### **Filing an Objection**

Written objections, including any attachments, must be filed (regular mail, fax, email, hand-delivery, or express delivery) with the Reviewing Officer at Nora Rasure, Objection Reviewing Officer, Intermountain Region, US Forest Service 324 25th Street, Ogden, Utah 84401; Fax: 801-625-5277; Email: [objections-intermtn-regional-office@fs.fed.us](mailto:objections-intermtn-regional-office@fs.fed.us) within 45 days following the publication date of this legal notice in the newspaper of record. The office business hours for those submitting hand-delivered objections are: 8 am – 4:30 pm Monday through Friday, excluding holidays. Electronic objections must be submitted in a format such as an email message, pdf, plain text (.txt), rich text format (.rtf), and Word (.doc or .docx) to [objections-intermtn-regional-office@fs.fed.us](mailto:objections-intermtn-regional-office@fs.fed.us). It is the responsibility of Objectors to ensure their objection is received in a timely manner (§ 218.9).

The publication date in the Sun Advocate, newspaper of record, is the exclusive means for calculating the time to file an objection of this project. Those wishing to object to this proposed project should not rely upon dates or timeframe information provided by any other source.

Sincerely,



MICHAEL DIEM  
District Ranger



# **Draft Decision Notice and Finding of No Significant Impact for the La Sal Mines Complex Plan of Operations Amendment**

USDA Forest Service  
Moab-Monticello Ranger District  
Manti-La Sal National Forest  
San Juan County, Utah

## **Introduction**

A Plan of Operations Amendment (POA) for the La Sal Mines Complex was submitted to the Manti-La Sal National Forest in 2010. The POA proposed expansion of existing operations at the La Sal Mines Complex, a complex of four underground uranium mines located near the town of La Sal, Utah. An approved plan of operations is required to authorize this activity, because it proposes locatable minerals development on National Forest System (NFS) Lands. The Plan of Operations was submitted by Denison Mines (USA) Corp. The La Sal Mines Complex and other Denison assets in the United States were acquired by Energy Fuels Inc. in 2012, and the company was renamed Energy Fuels Resources (USA) Inc. (Energy Fuels). Therefore, Energy Fuels is the proponent for the proposed POA.

The proposed (POA) is not a Forest Service (FS) proposal. The POA was developed and submitted by the proponent in accordance with their rights set forth by the General Mining Law of 1872 as amended, and in accordance with FS regulations for locatable minerals activities at 36 Code of Federal Regulation (CFR) 228 Subpart A. The proponent has a right to conduct mineral development activities on NFS lands associated with the La Sal Mines Complex. However, as the responsible official for this decision, I have the responsibility and authority to require reasonable and practicable requirements for environmental protection. I also have the responsibility to analyze and disclose the environmental effects of the proposed action in accordance with the National Environmental Policy Act of 1969 (NEPA) and associated Council on Environmental Quality (CEQ) and FS regulations.

The purpose and need for this action is to allow Energy Fuels to exercise their rights under U.S. mining laws while protecting the environment in accordance with FS regulations at 36 CFR 228 Subpart A. The proposed action is to approve the POA as submitted by Energy Fuels, which would authorize expansion of the La Sal Mines Complex on NFS lands. The proposed action and alternatives were analyzed in an Environmental Assessment (EA), which identified key issues, developed alternatives and analyzed likely environmental effects of three alternatives.

The proposed POA includes both NFS lands and other federal lands managed by the US Bureau of Land Management (BLM). The environmental analysis was conducted jointly by the BLM and the FS with BLM as the lead agency. Each agency is responsible to make a separate decision on the proposal. My decision will apply only to NFS lands, and the BLM decision will apply only to BLM-managed lands. An important focus of my decision is determining the reasonable and practicable requirements for protection of the environment. These requirements must protect surface resources of NFS lands



such as cultural resources, wildlife, water, vegetation and land; and they must also allow Energy Fuels to exercise their right to expand the La Sal Mines Complex on NFS lands.

A No Action alternative, which would not authorize expansion of the La Sal Mines Complex, was analyzed in the EA in accordance with NEPA requirements. However, I cannot select the No Action alternative, because it would not meet the purpose and need of the action-- to allow Energy Fuels to exercise their rights under U.S. mining laws while protecting the environment in accordance with FS regulations. Two action alternatives were analyzed in detail in addition to the No Action alternative. The alternatives were defined as follows:

- Alternative A- Approve the POA as submitted
- Alternative B- the No Action alternative
- Alternative C- Require modifications to the POA prior to approval

### Decision and Reasons for the Decision

Based upon my review of all alternatives, I have decided to implement Alternative C, which requires specific modifications to the POA prior to approval. The modifications are described in detail in Attachments 1 and 2. Once these modifications have been made in the proposed POA and a reclamation bond has been submitted in accordance with 36 CFR 228.13, I will approve the POA and authorize expansion of the La Sal Mines Complex on NFS lands. When compared to the other alternatives, this alternative will best meet the purpose and need of the action by authorizing the proposed locatable minerals development, while protecting the environment in accordance with environmental protection requirements of 36 CFR 228.8, Forest Service Manual and Handbook Direction (FSM 2800, FSH 2800), and the Manti-La Sal National Forest Plan.

Components of the existing POA that will be approved by my decision are summarized in the following table and described in detail in Section 2.2 and 2.4 of the EA.

Activity	Description	Acres of NFS lands included in this decision
Exploration drilling	Authorize exploration drilling and associated construction of access roads and drilling sites	34
Ventilation shaft installation and operation	Authorize construction and operation of ventilation shafts and associated access roads	14
Compilation of previously authorized activities	Compile activities authorized by three existing FS Plans of Operations (POs) into the new POA, and apply modern environmental protection and reclamation requirements to these previously authorized activities	0

The proposed POA addresses mining activities on NFS lands and other federal lands managed by BLM. The POA also describes additional mining activities, which will occur on private and state of



Utah lands that are encompassed by the La Sal Mines Complex. Mining-related activities that would occur on lands not subject to FS regulatory jurisdiction include additional exploration drilling and ventilation shaft installation, modification of surface facilities at the Pandora Mine, and compilation of mineral development activities that were previously approved in two existing BLM POs into the new POA. The EA analyzed the combined effects of these mining activities on the environment, but my decision only applies to the components of the La Sal Mines Complex POA that will occur on NFS lands.

The proponent proposed compilation of previously approved POs into the new POA to simplify regulation of existing mine disturbance by BLM and FS and to facilitate efficient environmental compliance by the proponent. This facet of the POA addresses existing disturbed areas on federal lands associated with the La Sal mines complex. This is largely an administrative task that does not require re-approval of previously approved facilities at the La Sal Mines Complex, but it presents an opportunity for the FS and BLM to apply modern requirements for environmental protection and reclamation to these previously approved activities. The proposed POA included modifications to reclamation plans and development of interim management plans for existing mine facilities in accordance with current FS and BLM requirements.

Alternative C was developed to address key issues identified through public and internal scoping, and to comply with FS and BLM mining regulations, agency directives and land-use management plans. The alternative includes additional design features identified through the NEPA process and described in Attachment 1, which will provide for improved protection of the environment as compared to either Alternative A or Alternative B. These design features will reduce effects to cultural resources, wildlife, vegetation and other surface resources of National Forest System Lands, and will facilitate effective reclamation of mining-related disturbance after the project is complete. Alternative C also includes Terms and Conditions of Approval, which are described in Attachment 2. These terms and conditions of approval are based on best management practices for locatable minerals development on NFS and BLM lands, requirements of FS and BLM land-use management plans, and FS and BLM experience managing plans of operations for locatable minerals operations.

Examples of additional design features of Alternative C are summarized below with respect to selected key issues:

- Cultural Resources- Alternative A included exploration drilling, ventilation shaft development and road construction, which would be conducted on NFS lands in three phases. The perimeter of each phase of proposed work was defined in the POA. However, the specific location of drilling sites and ventilation sites within the Phase 1, Phase 2 and Phase 3 perimeters was not specified. This could lead to adverse effects, if the proposed activities disturbed unidentified cultural resources (EA, Section 4.3). Alternative C requires pre-construction cultural resource surveys on NFS lands and avoidance of any sites that are identified and determined eligible for listing on the National Register of Historic Places. This will facilitate protection of cultural resources from direct effects of mineral development. Additional design features that will further protect cultural resources are included in the Terms and Conditions of Approval for Alternative C (Attachment 2).
- Groundwater- Although the effects analysis shows that it is not likely that the project will affect groundwater quality or quantity, several concerns were identified through scoping that relate to potential effects to groundwater. Therefore, specific design features were developed to provide for better protection of this important resource than would be offered by Alternative A or Alternative B. For example, Alternative C requires modifications to the proposed reclamation method for ventilation shafts that intersect the D-aquifer, and requires



groundwater monitoring to identify any unanticipated effects to groundwater if they do occur. This would reduce potential effects to groundwater associated with the project (EA, Section 4.6).

- **Noise-** Mine ventilation is required to provide a safe underground atmosphere for the mine workers. The mine ventilation system includes ventilation shafts, which are vertical shafts that extend from the underground mine to the surface, and ventilation fans, which force air either into or out of the underground mine. The existing surface ventilation fans are relatively loud, and concerns related to effects of noise to the public and to wildlife were identified through public scoping. Alternative C includes a design feature that requires new ventilation fans to be placed underground rather than on the surface. This will reduce the noise as heard by the public in the area of the ventilation fans by approximately 50 percent, which is a significant reduction in environmental effects caused by noise as compared to Alternative A (EA, Section 4.8).
- **Radiological Concerns-** The La Sal Mines Complex produces uranium, a naturally radioactive element, and radiological concerns were identified through public scoping. Several design features of Alternate C will improve protection of the environment from potential effects of radiation (EA Section 4.9). For example, under Alternative B, the no action alternative, there are no requirements for post-reclamation radiation dose limits at the existing Development Rock Areas (DRAs). Alternative A would stipulate a post-reclamation dose limit of 100 millirem per year (mrem/yr) for a person camping on a reclaimed DRA for 14 days. Alternative C requires a more stringent post-reclamation dose limit of only 15 mrem/yr for a person camping on a reclaimed DRA for 14 days. Potential radiological effects to NFS lands may also occur as a result of exploration drilling. This is addressed by an additional design feature of Alternative C, which requires pre- and post-drilling gamma radiation surveys, and reclamation of exploration drilling sites to gamma radiation levels that are no higher than the pre-drilling background levels. These design features of Alternative C will result in better protection of the environment from the effects of radiation than either Alternative A or Alternative B.
- **Reclamation-** The La Sal Mines Complex has been in existence since the 1970's, and reclamation is an issue for both existing and proposed disturbance. Several design features of Alternative C will improve reclamation performance and better support post-mining land uses (EA, Section 4.10). For example, an insufficient volume of stockpiled soil is a concern for reclamation at the La Sal Mines Complex, because soil stockpiling was not required during construction of some existing mine facilities. Alternative C includes a design feature that requires the proponent to construct revegetation test plots, and optimize reclamation methods with respect to soil thickness, seeding methods and other factors. Alternative C also requires the proponent to cover all affected areas with soil during reclamation, and identify a supplemental soil resource that will supplement the stockpiled soil, if necessary to support reclamation.
- **Wildlife-** The proposed expansion of the La Sal Mines Complex could affect wildlife in numerous ways. For example, the noise associated with exploration road construction, exploration drilling or ventilation shaft installation could cause avoidance of the area by birds (EA, Section 4.17). Alternative C will address this concern by requiring specific Terms and Conditions of Approval that protect wildlife such as seasonal and spatial wildlife buffers. These buffers restrict when and where surface disturbing activities such as exploration road construction, exploration drilling or ventilation shaft installation will occur.



Overall, Alternative C best meets the purpose and need for my decision. The alternative requires strict and specific design features that will provide for improved protection of the environment as compared to either Alternative A or Alternative B. Alternative C authorizes the proponent to exercise their right to expand the La Sal Mines Complex as set forth by the General Mining Law of 1872 as amended, and complies with the Forest Plan, applicable laws including the Multiple Use Mining Act of 1955 and the National Forest Management Act of 1976, and FS manual and handbook directives.

A reclamation bond is required for the La Sal Mines Complex under existing FS regulations at 36 CFR 228.13. The amount of the reclamation bond will be calculated by the FS, and the proponent must submit the required bond prior to approval of the POA. Calculation of the amount of the reclamation bond will be based on the FS guidance document *Training Guide for Reclamation Bond Estimation and Administration* (FS 2004). The reclamation bond was not an issue addressed in the EA, because the requirements for the reclamation bond are already decided by existing law and regulation.

### **Other Alternatives Considered**

In addition to the selected alternative, I considered two other alternatives in detail, Alternative A and Alternative B. These alternatives are summarized below and discussed in detail in Sections 2.2 and 2.3 of the EA. I also evaluated two additional alternatives, which were considered but eliminated from further analysis (EA, Section 2.5).

#### **Alternative A**

Alternative A would approve the POA as submitted by the proponent, and authorize the following activities on public lands managed by BLM and FS at the La Sal Mines Complex:

- Modification of surface facilities at the Pandora Mine
- Construction of temporary drilling sites and access roads to support exploration drilling
- Installation of ventilation shafts to provide for inflow and exhaust of air to support underground mining
- Compilation and modification of activities previously approved by two existing BLM POs and three FS POs and associated PO amendments, including any existing disturbed areas associated with the La Sal mines complex resulting from historic operations that may not have been fully delineated in those documents or in correspondence with previous operators into one POA that will address the entire La Sal Mines Complex

Alternative A includes expansion of an existing development rock pile at the Pandora Mine, which is located on federal lands managed by BLM. The proposed expansion would affect approximately 6 acres of additional land at the Pandora Mine. Following the completion of mine operations, the rock pile is proposed to be reclaimed in place by regrading the rock, providing for permanent surface water drainage control, placing topsoil as available, and seeding to establish vegetation.

Alternative A also includes construction of temporary drilling sites and access roads to support exploration drilling activities. The drilling process requires access for a truck-mounted drill rig and ancillary support vehicles, and construction of temporary drill sites. This temporary disturbance is only required for the time that is necessary to drill and then plug the exploration drill hole. Therefore, reclamation of disturbance caused by drilling activities is proposed to be conducted seasonally after drilling operations cease in an area. This would limit the disturbance to BLM and FS surface resources



that would be present at any given time.

Alternative A included additional ventilation shafts, which would be installed during the approximately 20 year mine life as required by the ongoing mining operations. The holes are vertical shafts of approximately 6 ft. diameter, which extend from the surface into the underground workings. The surface openings into the ventilation shafts would be secured with metal protective structures during mining operations. Ventilation shafts would be reclaimed after mining ceases at the La Sal Mines Complex, by backfilling the shafts and sealing the surface openings.

Alternative A proposed compilation of previously approved POs and all existing disturbed areas associated with the La Sal mines complex into one plan of operations to simplify regulation of the mine disturbance by BLM and FS and to facilitate efficient environmental compliance by the proponent. Alternative A also proposed modifications to reclamation and interim management plans for existing mine facilities.

### **Alternative B**

Alternative B is the No Action alternative, which assumes that the La Sal Mines Complex would not be expanded. Mining operations would continue under existing POs until mining ceased because of either a lack of required ventilation shafts, lack of exploration drilling or economic factors. Under Alternative B, the La Sal Mines Complex would be reclaimed in accordance with reclamation requirements of the existing FS and BLM POs when mining operations are complete.

### **Public Involvement and Scoping**

Scoping was conducted by both the BLM and the FS as part of this project. This process included initial public scoping via information mailers and public meetings, publication of the proposed POA on BLM and FS web pages, publication of a Notice of Proposed Action (NOPA) by the FS, publication of a draft EA by BLM, and notification by mail regarding the change in the FS appeals process associated with the new 36 CFR 218 regulations. Information learned from the public involvement and scoping process was used to identify key issues for analysis in the EA and to support development of alternatives.

A scoping letter describing the proposed action and soliciting comments was sent by BLM in cooperation with the FS to 418 interested parties on December 21, 2010. These parties included local, state, and Federal agencies; non-governmental organizations (NGOs); and the general public. Legal notices regarding project scoping were published in the Moab Times-Independent, the San Juan Record and the Sun Advocate newspapers. On January 6, 2011, a press release was published in the Moab Times-Independent newspaper, which announced a public meeting for the project. In addition, the POA was made available for public review on December 29, 2010 at public libraries in Moab, and Monticello, Utah, and at the La Sal Store in La Sal, Utah. BLM and FS subsequently held two public meetings, one in La Sal, Utah on January 13, 2011, and one, at the request of the public in Moab, Utah, on January 20, 2011. A total of 32 people attended the public meeting in La Sal, and 14 people attended the public meeting in Moab. The public comment period for scoping closed on January 31, 2011.

The BLM maintained digital copies of the POA on the Moab Field Office webpage and listed the EA scoping information on the BLM Environmental Notification Bulletin Board. The FS maintained digital copies of the POA on the Manti-La Sal National Forest webpage and listed the EA scoping information on the FS Schedule of Proposed Action (SOPA).

BLM and FS considered each document received in response to the request for public comment as a "comment document," including e-mails, faxes, and completed written comment forms. Each



comment document could include more than one comment. The January 2011 La Sal public meeting resulted in three comment documents submitted on comment forms provided by BLM. The January 2011 Moab public meeting resulted in one comment document submitted on a comment form. In addition to the comment documents gathered during the public meetings, 16 comment documents were sent to BLM and FS via mail or email during the BLM and FS comment period ending on January 31, 2011. Comment documents were received from 12 individuals, 1 Native American tribe, 7 NGOs, and 1 local government agency. Analysis of the scoping comments is presented in Appendix B of the EA.

A separate mailer was sent out by the FS as part of their NOPA to 53 interested parties on February 17, 2011 (interested parties included persons who commented during the initial scoping period, that live in close proximity to the project, or otherwise had an interest in the project). In addition, a legal NOPA was published in the newspaper of record for the Forest Service, the Sun Advocate, on February 22, 2011. The public comment period for the NOPA closed on March 23, 2011, 30 days after publication of the NOPA in the Sun Advocate newspaper. In response to the NOPA, the FS received six comment documents. NOPA comment documents were received from 3 individuals, 1 Native American tribe, 7 NGOs, and 1 local government agency. A response to comments received during the NOPA is included as Appendix C of the EA.

BLM released the EA for public comment on July 7, 2012 and the comment period ended on August 21, 2012. A total of 292 comments were received from five commenters. The EA was revised in response to these comments and the comments are summarized and addressed in Appendix D of the EA.

Section 428 of the Consolidated Appropriations Act, 2012 directed the Secretary of Agriculture to establish a pre-decisional objection process for projects and activities documented with a Decision Notice or Record of Decision in lieu of the post-decisional appeal process used since 1993. On March 27, 2013, a final rule revising 36 CFR Part 218 establishing a Predecisional Administrative Review Process was published in the Federal Register and became effective upon that publication date. Therefore, in November, 2013, the FS sent notifications to those who commented previously during project scoping to inform them of the change in FS regulations.

Issues were identified based on the public involvement and scoping information, and on internal scoping completed by BLM and FS resource specialists. The issues were categorized as either key or non-key issues based on the CEQ regulations. Key issues identified for analysis in the EA include the following:

- Air Quality
- Cultural Resources
- Development Rock
- Geology
- Groundwater
- Hazardous Waste
- Noise
- Radiological Concerns (including Radon)
- Reclamation
- Slope Stability
- Socioeconomics
- Surface Water
- Transportation
- Vegetation
- Visual Resources



- Wildlife
- Worker Health and Safety

Additional information regarding the key issues is presented in Section 1.10 of the EA (pages 1-10 through 1-20).

### **Finding of No Significant Impact**

After considering the context and intensity of environmental impacts described in the EA, I have determined this decision will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared. My determination is based on the following criteria outlined in the implementing regulations for the National Environmental Policy Act (40 CFR 1508.27).

#### **Context**

The project was evaluated with respect to local and regional, and short-term and longer-term contexts. Because this is a site-specific action that would apply only to activities on NFS lands associated with the La Sal Mines Complex, most effects will be local in nature. These local effects include short-term disturbance to approximately 212 acres and longer-term disturbance to approximately 42 acres. The short term disturbance will be associated with exploration drilling, ventilation shaft construction and construction of access roads to support these activities, and the longer term disturbance will be associated with operation of facilities that are needed for the life of the mine including ventilation shaft operation and surface support facilities for the underground mine. The figures of 212 acres of short-term disturbance and 48 acres of long-term disturbance include all anticipated disturbance associated with the project including disturbance to NFS lands, federal lands managed by BLM, state lands, and private lands. These values also include the cumulative disturbance caused by the project that will occur over the approximately 20-year mine life. Additional information regarding disturbance associated with the project is presented in Sections 2.2 and 2.4 of the EA.

The short-term disturbance will be reclaimed following completion of the work, and, therefore, the short-term disturbance in any given year will be limited. For example, short-term disturbance on NFS lands during any given year will range from 14 to 19 acres. This disturbance will be reclaimed after the work is completed, and the disturbed areas will begin to regenerate a self-sustaining vegetative cover that meets Forest Plan land use goals for the area. The longer-term disturbance will remain for the approximately 20-year mine life, and will be reclaimed after permanent cessation of mining activities. At that time, those disturbed areas will begin to regenerate a self-sustaining vegetative cover that meets Forest Plan land use goals for the area. During the initial years after reclamation, the reclaimed vegetation will be at earlier seral stages than adjacent areas of pinion juniper forest, which will provide for diversity in habitat types in the area. Over a period of years to decades after reclamation, these areas will naturally regenerate into seral stages that are similar to the existing vegetation in the area. Effects to vegetation and associated wildlife habitat are discussed in the EA in Section 4.15 and Section 4.17.

Ore produced at the La Sal Mines Complex will be hauled to the White Mesa mill near Blanding, Utah, for mineral processing. Potential regional effects associated with haulage of the ore and mineral processing were analyzed. Increases to regional truck traffic on Utah State Routes (UR) 46 and 191 will range from approximately 2 to 3 percent, which is considered minor. Potential effects to air quality and groundwater at the White Mesa mill were also examined. These effects will also be minor, because the White Mesa mill is an existing facility that operates under approved mineral processing, air quality and groundwater discharge permits. Uranium production at the White Mesa Mill utilizes ore



mined at other locations, and is not dependent on ore produced at the La Sal Mines Complex. Potential effects on air quality, groundwater and transportation are described in the EA in Sections 4-2, 4-6 and 4-14.

### Intensity

The following factors were considered to evaluate intensity:

**1. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.**

Both beneficial and adverse effects were considered. Any impacts perceived as beneficial did not influence or outweigh my understanding or consideration of negative impacts.

**2. The degree to which the proposed action affects public health or safety.**

I considered potential effects to public health and safety in relation to air quality, development rock, groundwater, noise, radiological concerns, surface water, transportation and worker health and safety. These effects analyses are discussed in the EA in Sections 4.2, 4.4, 4.6, 4.8, 4.9, 4.13, 4.14, and 4-18 respectively. The mine must comply with existing state and federal requirements for protection of air quality, groundwater, radiological effects, surface water, transportation, and worker health and safety. These existing state and federal laws were designed for protection of public health and safety and the environment, and I consider the level of protection provided by these laws adequate to protect public health and safety. Also, additional design features are included in Alternative C, which will provide for further protection of public health and safety. For example, although no existing laws regulate noise levels produced by ventilation fans, specific design features of Alternative C will provide for reduced noise levels at new ventilation fans. Similarly, although no existing laws regulate post-reclamation radiological dose levels at reclaimed DRAs, Alternative C includes a specific design feature that requires a post-reclamation radiological dose level that is equal to, or lower than, standards applied to similar facilities by state and federal laws and US Environmental Protection Agency (EPA) guidance.

**3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.**

The characteristics of the geographic area that will be affected by the project are not unique or ecologically critical. The vegetation and habitat types that will be affected are common in Manti-La Sal National Forest and on adjacent federal lands managed by the BLM. Canyonlands National Park is located approximately 27 miles west of the La Sal Mines Complex. Potential air quality effects were analyzed in the EA (Section 4.2), and the project is unlikely to cause adverse effects to air quality at Canyonlands National Park.

**4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.**

The environmental effects analysis was completed by a team of interdisciplinary technical specialists including FS resource specialists, BLM resource specialists, and consultants with expertise in the various resource areas assessed in the EA. Based on the results of this interdisciplinary assessment, the anticipated effects to the quality of the human environment presented in Chapter 4 of the EA are not controversial.



**5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.**

The environmental effects analysis (EA, Chapter 4) demonstrates that the impacts of the project are not uncertain and do not involve unique or unknown risk. Uranium mining has been conducted in the United States since the 1950's, and the potential effects of uranium mining on the human environment are well-documented. A mature regulatory framework currently exists at the federal and state levels, which strictly regulates uranium mining and reduces potential effects of uranium mining on the human environment.

**6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.**

The project is a site-specific action, which would authorize the proponent to exercise their rights under the General Mining Law as amended. The decision applies only to the proposed POA at the La Sal Mines Complex, and does not establish a precedent for any future actions.

**7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

Past, present and reasonably foreseeable actions were considered and analyzed in conjunction with the proposed activities. I do not consider any of the cumulative effects discussed in the EA significant. Cumulative effects are disclosed in Chapter 4 of the EA.

**8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.**

Cultural resources that require protection may be present in the project area, but the selected alternative includes a design feature that requires pre-construction surveys for cultural resources and avoidance of any sites that are eligible for listing on the National Historical Register. Therefore, the project would not cause loss or destruction of significant cultural or historical resources.

**9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.**

A biological assessment and evaluation was conducted and is included as part of the EA (Appendix G of the EA). The biological assessment and evaluation determined that there are no endangered or threatened species occurring in the project area (EA, Section 3.3.16.1). Therefore it is unlikely that the project would affect endangered or threatened species. Effects to wildlife are addressed in Section 4.17 of the EA.

**10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.**

This action does not violate other federal, state or local laws designed for the protection of the environment.

**Conclusion**

After considering the environmental effects described in the EA and specialist reports, I have determined that Alternative C will not have significant effects on the quality of the human



environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

## **Findings Required by Other Laws and Regulations**

My decision is consistent with the following laws, regulations and executive orders.

### ***Mining Law of 1872 as Amended***

This law confers a statutory right upon individuals to enter onto public lands to search for minerals. Forest Service policy (36 CFR 228, Subpart A) is to encourage mineral development on public lands that are legally open for mineral entry. It is the national and Forest Service policy that surface use elements in this decision would be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources.

### ***Multiple-Use Act of 1955 as Amended***

The activities included in my decision limit surface uses to those which are considered reasonably incidental to the stage of the mining operation.

### ***Mining and Minerals Policy Act of 1970***

This legislation established the federal government's overall policy to foster and encourage private enterprise in the development of economically sound and stable industries. The Act identified the need for the orderly and economic development of domestic resources to help assure satisfaction of industrial, security and environmental needs.

### ***Clean Air Act of 1970 as Amended***

The La Sal Mines Complex is subject to the requirements of the federal Clean Air Act as amended, which is administered in the state of Utah by the Utah Department of Environmental Quality (UDEQ). Emissions from regulated sources are managed through issuance of air quality permits called Air Approval Orders. An existing Approval Order is in place, which authorizes air emissions associated with underground mining operations, ore and rock handling and storage, diesel generator and air compressor operations, and ore transport (EA, Section 4.2). The La Sal Mines Complex is also subject to the radon emissions limits set forth in the National Emissions Standards for Hazardous Air Pollutants (EA Section 4.9).

### ***Clean Water Act of 1972 as Amended***

The project is subject to the requirements of the Clean Water Act as amended. The state of Utah has delegated authority to administer portions of the Clean Water Act in Utah, and regulatory requirements for surface water are set forth in existing Utah Surface Water Quality Standards. The state of Utah's water quality antidegradation policy requires maintenance of water quality to protect existing in-stream beneficial uses on streams designated as Category 1 High Quality Waters. All surface waters geographically located within the outer boundaries of the Manti La Sal National Forest whether public or private are classified as Category 1 High Quality Waters. However, no perennial or intermittent surface water bodies are present on NFS lands that will be affected by the project. Potential effects to surface water quality associated with the project will be addressed using best management practices in accordance with the *National Best Management Practices for Water Quality Management on National Forest System Lands* (FS 2012), Forest Plan Standards and Guidelines, and applicable Forest Service directives (EA, Section 4.13). In addition, an existing General Stormwater Permit for Discharges Associated with Industrial Activity from Metal Mining issued by UDEQ is in place for the project (EA, Section 3.3.12).



*National Forest Management Act (NFMA) of 1976 as Amended*

This decision to require specific modifications to the La Sal Mines Complex EA prior to approval (Alternative C) is consistent with the intent of the forest plan's long term goals and objectives. The alternative was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines. Forest Plan consistency is discussed in Section 1.6.2 of the EA.

*Endangered Species Act*

A Biological Assessment and Evaluation was completed for this project, which determined that no species listed as threatened or endangered by the US Fish and Wildlife Service have the potential to occur in the project area and that the project would have no effect on those species. Effects to wildlife including endangered species are addressed in Sections 3.3.16 and 4.17 of the EA.

*National Historic Preservation Act*

The selected alternative requires pre-construction cultural resources surveys and avoidance of any cultural resources that are eligible for listing on the National Register of Historic Places, and effects to cultural resources will be addressed through the Terms and Conditions of Approval as shown in Attachment 2. Effects to cultural resources are discussed in Section 4.3 of the EA.

*Executive Order 12898 (environmental justice):*

No low-income or minority populations would be adversely or disproportionately affected by the project.

*Forest Service Mining Regulations (36 CFR 228A)*

The POA was submitted under the authority of the 1872 Mining Law as amended. The FS derives the authority to regulate such activities from the 1897 Organic Act (16 USC 478, 551), the Multiple Use Mining Act of 1955 (30 USC 612), and Mining and Mineral Policy Act of 1970 as reissued in the 1990s. The FS decision regarding the POA must be in accordance with FS mining regulations at 36 CFR 228A.

**Administrative Review and Objection Rights**

This draft FONSI and Decision Notice is subject to a 45-day objection and review period as set forth by FS regulations at 36 CFR 218. Individuals, NGO's, state and local governments, Indian Tribes, businesses and partnerships who have submitted timely, specific written comments regarding the project may file an objection. These comments must have been submitted during project scoping or during any other instance where the responsible official seeks written comments. Other federal agencies may not file objections.

The starting date for the 45-day objection and review period is the day after publication of the legal notice of this draft Decision Notice and FONSI in the newspaper of record for the Manti-La Sal National Forest, the Sun Advocate newspaper located in Price, Utah. The objection must be filed in writing with the Objection Reviewing Officer, Nora Rasure, Regional Forester for the FS Intermountain Region:

Objection Reviewing Officer  
Intermountain Region USFS  
324 25th Street, Ogden, Utah 84401  
Fax to: 801-625-5277  
Email to: [objections-intermtn-regional-office@fs.fed.us](mailto:objections-intermtn-regional-office@fs.fed.us)



The objection must include the name, address and telephone number of the objector; the name of the proposed project; the name and title of the responsible official; and the name of the national forest and ranger district on which the proposed project will be implemented. The objection must contain a description of those aspects of the project addressed by the objection, including:

- Specific issues related to the proposed project
- If applicable, an explanation of how the objector believes the environmental analysis or draft decision specifically violates law, regulation or policy
- Suggested remedies that would resolve the objection
- Supporting reasons for the reviewing officer to consider
- A statement that demonstrates the connection between prior written comments on the particular project or activity and the content of the objection, unless the objection concerns an issue that arose after the designated opportunities for comment

If an objection is filed, the reviewing officer will respond in writing to the objection within 45-days following the end of the objection filing period. This period may be extended by an additional 30 days at the discretion of the reviewing officer.

Prior to issuance of the reviewing officer's written response to an objection, either the reviewing officer or the objector may request a meeting to discuss issues raised in the objection and potential resolution of the objection. After review of the objection, the reviewing officer will provide a written response to the objection. No further review from any other FS or US Department of Agriculture official of the reviewing officer's written response to the objection is available.

As the responsible official for this decision, I will not sign the Decision Notice until the reviewing officer has responded in writing to all objections and all concerns and instructions identified by the reviewing officer in the objection response have been addressed in accordance with the 36 CFR 218 regulations.

### **Implementation**

If no objections are filed within the 45-day time period, implementation of the decision may occur on, but not before, the fifth business day following the end of the objection filing period. When objections are filed, implementation may occur on, but not before, the reviewing officer has responded in writing to all objections and all concerns and instructions identified by the reviewing officer in the objection response have been addressed.

For further information concerning the La Sal Mines Complex project, please contact Joel Nowak at 435-587-2041 or [joelnowak@fs.fed.us](mailto:joelnowak@fs.fed.us) during normal business hours.

Approved by:

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Brian M. Pentecost  
Forest Supervisor  
Manti-La Sal National Forest

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Date



## References

US Forest Service (FS), 2012, National Best Management Practices for Water Quality Management on National Forest System Lands, Volume 1: National Core BMP Technical Guide, FS-990a, April, [http://www.fs.fed.us/biology/resources/pubs/watershed/FS\\_National\\_Core\\_BMPs\\_April2012.pdf](http://www.fs.fed.us/biology/resources/pubs/watershed/FS_National_Core_BMPs_April2012.pdf)

US Forest Service (FS), 2004, Training Guide for Reclamation Bond Estimation and Administration, April, [http://www.fs.fed.us/geology/bond\\_guide\\_042004.pdf](http://www.fs.fed.us/geology/bond_guide_042004.pdf)



## **Attachment 1: Modifications to La Sal Mines Complex Plan of Operations Amendment Required Prior to Approval**

I have selected Alternative C of the La Sal Mines Complex Environmental Assessment, which requires specific modifications to the POA prior to approval. After these modifications have been made in the POA and a reclamation bond has been submitted in accordance with 36 CFR 228.13, I will approve the POA and authorize the proposed expansion of the La Sal Mines Complex.

Alternative C includes all components of the proposed POA, but requires the following specific modifications:

### **Vent and Production Shaft Reclamation**

The proponent shall implement engineering mitigations to reduce the potential for interaction of development rock with the D aquifer for all vent and production shafts located on lands under the jurisdiction of the FS. Development rock will not be used for backfilling of ventilation shafts within the D-aquifer. Prior to reclamation of any ventilation shafts on NFS lands that penetrate the D-aquifer, the proponent shall provide engineering designs and specifications for FS review.

### **Pre-Construction Radon Assessment for New Ventilation Shafts**

The proponent shall submit pre-construction radon modeling for FS review prior to constructing ventilation shafts on NFS lands. The pre-construction radon modeling shall be conducted in accordance with US Environmental Protection Agency and Utah Division of Air Quality (UDAQ) requirements. These assessments shall estimate expected radon discharge rates, location of potential receptors to the proposed ventilation shaft, and compliance with applicable regulations.

The pre-construction radon modeling must demonstrate that emissions from the ventilation shaft would be in compliance with the requirements of 40 CFR 61 Subpart B. If preconstruction radon modeling does not demonstrate that the ventilation shaft would be expected to comply with the regulation, design modifications must be implemented to comply with the regulation, or the ventilation shaft shall not be constructed. After construction, monitoring of radon emissions shall be conducted in accordance with 40 CFR 61, Subpart B or other EPA or UDEQ-approved methods for the life of the ventilation shafts.

### **Pre-Construction Cultural Resource Surveys**

Prior to construction of exploration drill holes, ventilation shafts, and associated access roads on NFS lands, the proponent shall conduct cultural resource surveys of the specific locations these facilities within in Phases 1, 2 and 3. The proponent shall avoid any cultural resources eligible for listing on the National Register of Historic Places. The cultural resource surveys shall be conducted in accordance with FS direction, and the completed cultural resource surveys and plans for avoidance shall be provided for FS review a minimum of 30 days prior to construction.

### **Pre-Construction Wildlife and Vegetation Surveys**

Prior to construction of exploration drill holes, ventilation shafts, and associated access roads on NFS lands, the proponent shall conduct wildlife and vegetation surveys of the specific locations for exploration drill holes, ventilation shafts, and associated access roads within in Phases 1, 2 and 3.



These areas shall be surveyed for the presence of threatened, endangered or sensitive wildlife or vegetation including:

- Bald eagle (*Haliaeetus leucocephalus*)
- Ferruginous hawk (*Buteo regalis*)
- Flammulated owl (*Otus flammeolus*)
- Gunnison's Prairie dog (*Cynomys gunnisoni*)
- Lewis' woodpecker (*Melanerpes lewis*)
- Northern goshawk (*Accipiter gentilis*)
- Peregrine falcon (*Falco peregrinus anatum*)
- Golden eagle (*Aquila chrysaetos*)
- Beaman's Townsendia (*Townsendia beamanii*), a BLM sensitive plant species

If these species are found to be present or likely to be present in the project area, potential effects to the species shall be managed in accordance with FS regulations, directives, and as set forth in terms and conditions of approval for the POA, which are included as Attachment 2.

### **Modification of Reclamation Approach**

The reclamation plan proposed in the POA amendment shall be modified to include the following:

- Within 6 months of approval of the POA, the proponent shall submit a revegetation test plot design for FS review, which will evaluate reclamation practices at exploration areas and ventilation shafts located on NFS lands
- Within 12 months of approval of the POA, the proponent shall install reclamation test plots in accordance with the design, provide for periodic monitoring as specified by the design, and provide periodic reclamation performance data to the FS for review and comment
- The proponent shall identify potential soil borrow sources within the permitted surface disturbance of federally managed lands and on adjacent state or private lands that could be used to increase the extent of soil replacement and soil cover thickness during reclamation of the mine facilities
- The proponent shall submit reclamation approaches developed and optimized based on performance of the reclamation test plots to the FS for review and comment, and shall implement these optimized reclamation approaches during reclamation of all NFS lands that are disturbed by the La Sal Mines Complex, including provision of additional soil to use during reclamation, if necessary

### **Management of Noise**

The proponent shall install all new ventilation fans placed on NFS lands underground, unless installation underground is not feasible because of health and safety concerns as identified by MSHA (Mining Safety and Health Administration). In the event that underground installation is deemed not feasible by the proponent, the proponent shall provide an explanation of the health and safety concerns produced by an independent mining engineer and an alternative mitigation strategy to manage noise.

In addition, where existing fans present a localized noise concern to La Sal residents, the proponent shall utilize available engineered methods to reduce noise including installation of sound barriers to



direct noise away from receptors, extended risers on fans to dissipate noise, and baffles in cases where such modifications to existing fans are available.

### **Modifications to Pandora Development Rock Area**

Alternative C of the EA provides for a larger expansion of the Pandora DRA as compared to the Proposed Action, which would provide additional capacity to accommodate future development rock production. This would also provide additional area to create final reclamation slopes that are stable and self-sustaining. Assuming reclamation slopes of 3H:1V, this conceptual approach would provide a total development capacity of approximately 865,000 cy. This will increase the affected area boundary at the Pandora Mine to 20.3 acres, an increase of approximately 5 additional acres as compared to the Proposed Action.

The Pandora DRA is located on federal lands managed by BLM, and therefore, my decision does not apply to the Pandora DRA. This modification would affect visual resources in the area. I did consider these effects to visual resources in arriving at my decision, which applies only to mining-related activities that will occur on Forest System Lands.

### **Additional Terms and Conditions of Approval**

The Terms and Conditions of Approval of the La Sal Mines Complex POA set forth in Attachment 2 shall apply to the La Sal Mines Complex from the date of approval of the POA until mining and reclamation is completed and the reclamation bond is released in accordance with 36 CFR 228.13.



## **Attachment 2: Terms and Conditions of Approval for La Sal Mines Complex Plan of Operations Amendment**

### **1.0 Terms and Conditions Applicable to All Activities**

#### **1.1 General**

1. Approval of this Plan of Operations Amendment (POA) does not constitute recognition or certification of the validity of ownership by any person named as owner herein.
2. Approval of the POA does not constitute now or in the future, recognition or certification of the validity of any of the mining claims to which it may relate nor the mineral character of the land on which it lies.
3. Changes and additions to the POA must be submitted to the US Bureau of Land Management (BLM) Field Manager or US Forest Service (FS) District Ranger as appropriate based on land status. The BLM Field Manager or FS District Ranger shall determine if the proposed change or addition requires approval as a revised or supplemental plan. If a revised or supplemental plan is deemed necessary, it must be approved by the BLM Field Manager or FS District Ranger before the changes or additions are implemented.
4. All surface disturbing activities and operations must be supervised by a company representative knowledgeable of the terms of and conditions of approval and design features of the POA.
5. The BLM Field Manager and FS District Ranger or his designated representative must be notified when operations are completed and informed as to when reclamation work will begin.
6. The operator shall obtain all other necessary federal, state, or local permits/authorizations before operations begin, and comply with all local, state and federal laws. Documentation of compliance with other laws shall be provided by the operator to BLM or FS upon request.
7. Upon request by the BLM Field Manager or FS District Ranger, the operator shall provide BLM or FS a copy of permits, plans, inspection reports, and monitoring reports issued or required by other local, state, and federal agencies.

#### **1.2 Buildings and Facilities**

1. New buildings and other facilities shall be painted with a BLM- or FS-approved paint from either the chart of Standard Environmental Colors, the chart of Supplemental Environmental Colors or other color chart designated by BLM or FS as appropriate based in land status.

#### **1.3 Roads**

1. The operator will obtain a road use permit for system roads and abide by all conditions. The operator is responsible for immediate repairs of any and all damages to BLM or FS roads, structures, and improvements, which result from his operations, at his own expense.



2. Vehicle operators must maintain safe speeds commensurate with existing road traffic and weather conditions.
3. The operator shall consult with the San Juan County Road Department for the placement and installation of all safety and directional signs and cattle guards on county roads.
4. Roads constructed to facilitate access to the ventilation shafts shall be gated and locked when not in use unless otherwise specified by BLM or FS as appropriate based on land status.

#### 1.4 Fire

1. All motorized equipment shall have working mufflers and spark arresters. Electrical equipment must be properly insulated. Vehicles equipped with catalytic converters will be parked in clear areas to avoid igniting potential fuels such as grass and brush.
2. All operator vehicles used for surface operations shall be equipped with fire extinguishers and shovels.
3. The following operational procedures will be followed:
  - Smoking will only be allowed in vehicles and/or designated smoking areas; all cigarette butts will be placed in appropriate containers and not thrown on the ground or out windows of vehicles.
  - Cooking, campfires, or fires of any kind will not be allowed.

#### 1.5 Cultural and Paleontological Resources

1. Collection of paleontological or cultural resources is prohibited.
2. If fossils, human remains, funerary items, sacred objects or other cultural resources are uncovered during surface-disturbing activities, the operator and/or its contractors will immediately suspend operations at the site and the discovery will be immediately reported to BLM or FS as appropriate. BLM or FS will arrange for a determination of significance, and if necessary, recommend a recovery or avoidance plan.
3. All vehicular traffic, personnel and equipment movement, and construction activities will be confined to the locations surveyed for cultural and paleontological resources, or to the existing roadways and/or inventoried access routes.

#### 1.4 Wildlife Resources

1. Project activities will be conducted in compliance with applicable requirements of the Endangered Species Act of 1973, as amended.
2. Harassment of wildlife or livestock is prohibited.
3. Raptor management will be guided by Best Management Practices for Raptors and Their Associated Habitats in Utah (BLM 2008b:Appendix M) and Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (Romin and Muck 2002). If construction is scheduled between the dates of January 1 and September 31, breeding season raptor surveys will be required prior to construction. Field surveys will be conducted as determined by the authorized officer of BLM or the FS as applicable. Based on the result of



the field survey, the authorized officer will determine what buffers and timing limitations are appropriate and necessary.

4. In order to avoid impacts to potential nesting birds within the project area, vegetation removal shall not occur during the breeding season (most migratory birds nest between May 15 to July 15) unless nest surveys are conducted within a five-day window of vegetation removal to aid in nest avoidance.
5. During times of temporary cessation, entrances to the mine will be closed to exclude bats from entering the mine. The preferred method for exclusion of bats from an adit or shaft is to block the portal or collar with 1-inch– diameter chicken wire.
6. No surface disturbing activities will occur from November 15 to April 15 within crucial deer and/or elk winter range to minimize stress and disturbance to deer and elk during winter months. This stipulation does not apply to maintenance and operation of existing facilities. An exception may be granted by the Authorized Officer.

### 1.5 Vegetation

1. All equipment, including on-road and off-road equipment, shall be cleaned to remove weed seed and soil (may contain weed seed) prior to commencing operations on public lands within the project area. The operator shall monitor disturbed areas in the project area for project-related establishment and spread of noxious and exotic weeds. The operator shall treat weed infestations as necessary and as approved by the BLM or FS to prevent additional spread.
2. Vegetation removal on Forest System lands shall be authorized by FS prior to removal.
3. When pruning branches to clear vegetation, branches will be pruned to within one inch of the trunk.

### 1.6 Reclamation

1. The BLM or FS representative as applicable based on land status shall be contacted at least 2 working days prior to the start of reclamation.
2. Disturbed areas at the La Sal Mines Complex shall be reclaimed such that the potential dose to a member of the public, assumed to be a person camping on or near reclaimed areas for 14 days, is less than 15 mrem/yr above background.

### 1.7 Bonding

1. The reclamation bond for the project may be reviewed by BLM or FS on a periodic basis for activities and/or surface disturbance authorized by this POA. If the authorized officer determines that the existing reclamation bond is not adequate to cover the costs of reclamation because of changing or unanticipated conditions or does not meet the regulations or policy of the agency, an updated reclamation bond shall be recalculated by BLM or FS as appropriate based on land status. If additional bond is necessary, the operator shall submit the additional bond within 90 days of notification by the authorized officer of BLM or FS as appropriate based on land status.
2. Prior to bond release, a final inspection of the project area must be made by the operator with the BLM Field Manager or District Ranger or his designated representative as appropriate based on land status.



## 1.7 Monitoring

1. Within 6 months of approval of the POA, the operator shall provide a groundwater monitoring plan for BLM and FS approval that will provide for monitoring of groundwater quality and quantity at the La Sal Mines Complex.
  - a. Within 6 months of approval of this groundwater monitoring plan by BLM and FS, the operator shall install monitoring wells and/or other monitoring equipment and commence monitoring of groundwater quality and quantity.
  - b. Groundwater monitoring shall continue until cessation of the groundwater monitoring program is approved by BLM and FS or all reclamation liability for the mine site is released in accordance with BLM and FS regulations.
2. Within 6 months of approval of the POA, the operator shall provide a soils monitoring plan to BLM and FS for approval that will provide for monitoring of effects to soils from mine ventilation shafts.
  - a. Soils monitoring shall continue until reclamation liability for the mine site is released in accordance with BLM and FS regulations or as otherwise approved by BLM and/or FS as appropriate based on land status.

## 2.0 Terms and Conditions Applicable to Mine Surface Facility Operations

1. All chemicals and hydrocarbon products (including used oil) shall be contained and controlled in accordance with the Spill Prevention Control and Countermeasure Plan (SPCCP) pursuant to 40 CFR Section (§) 112. An up-to-date copy of the SPCCP shall be present at mine surface facilities and provided to BLM or FS upon request. All operator personnel and contractors shall be trained in applicable procedures specified in the SPCCP.
2. The BLM Hazardous Material Coordinator and/or Forest Service as appropriate based on land status shall be notified as soon as possible if a spill occurs during ore transport or if an incident occurs resulting in the spill of petroleum products on BLM or Forest System lands that exceed reportable quantities set forth in the SPCCP. The operator shall manage the spill as set forth by the SPCCP or the Ore Transportation Emergency Response Plan as appropriate.
3. In accordance with 30 CFR Section §47.51 the operator shall maintain a file containing Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are utilized during the course of construction, mining, and reclamation operations. This file shall be available for reference and inspection at all times at the site.
4. A roll-off container or other approved container for disposal of trash shall be located on site. All trash shall be placed in the container and transported to an approved land fill.
5. Appropriate disposal or recycling of applicable materials such as batteries, scrap metal, used oils, tires, and antifreeze shall take place during mine operations temporary cessation and reclamation.
6. Sanitation facilities shall be provided on site during mining operations.
7. The operator shall manage air quality in accordance with their Utah Air Approval Order (state air quality permit) and the National Emissions Standards for Hazardous Air Pollutants.



8. The operator shall implement dust suppression measures including tarping of truck beds on ore haul trucks prior to leaving the mine, and application of water and/or other approved dust suppressants on the mine haulage road and other areas of the mine.
9. Development rock samples will be collected from active DRAs and analyzed once per year to ensure that environmental characteristics have not changed. This data and an annual summary report shall be provided to the BLM. If DRA sampling indicates environmental characteristics of development rock have changed, the operator shall prepare and submit a mitigation plan to BLM for approval.

### **3.0 Conditions Applicable to Access Road Construction, Exploration Drilling and Ventilation shaft Installation**

#### **3.1 Review Process for Proposed Access Road, Exploration Drilling and Ventilation shaft Locations**

1. Prior to construction of access roads, exploration drill holes or ventilation shafts within the phase boundaries established by the POA, the operator shall submit detailed location information for placement of these facilities. This information shall be supplemented by wildlife surveys, vegetation surveys, and cultural resource surveys of all proposed affected areas. The boundaries, timing and content of these surveys shall be determined by the authorized officer of BLM or FS, as appropriate based on land status, prior to completion of the surveys. The operator shall avoid all sensitive areas designated by BLM or FS (as appropriate based on land status) based on the results of these surveys.
2. The information described above will be evaluated by the authorized officer to assess compliance of the proposed activities with the POA. Ground-disturbing activities associated with access road, exploration drill hole or ventilation shaft construction shall not begin until a notice to proceed is issued by the authorized officer. If proposed access roads, exploration drill holes or ventilation shafts do not comply with the POA, the authorized officer may require submittal of a modification to the POA prior to approval of the activities.

#### **3.2 General Terms and Conditions Applicable to Exploration Drilling and Ventilation shaft Installation, Operation and Reclamation**

1. Before exploration drilling starts, the operator shall record background gamma radiation levels in the exploration area. The 95<sup>th</sup> percentile upper confidence limit of the mean of background measurements shall be the target level for reclamation of exploration drilling sites. If this target is not achieved, the authorized officer of BLM or FS as appropriate based on land status may require further reclamation until it is attained.
2. All drill cuttings that show gamma exposure values in excess of background levels shall be buried and covered with no less than 3 feet of earthen material and covered with soil to attenuate gamma exposure values to background levels. In some cases where it is impractical to dig a pit for cuttings, such as when bedrock is at the surface, the cuttings shall be removed to another approved site for disposal. No cuttings, even if not radioactive, shall be left on the surface.
3. Rutting will be used as an indicator of wet conditions. To the extent practicable, vehicle traffic and equipment operation on exploration and ventilation hole access roads will be restricted to prevent rutting in excess of one inch on gravel roads, 2 inches on native surface roads and 4-6



inches in other work areas. The operator shall provide maintenance equipment to repair rutting as soon as ground conditions permit.

4. During extended periods of dry weather, the authorized officer of BLM or FS may recommend additional protective measures for exploration or ventilation access roads, including vehicle and equipment restrictions to prevent powdering of soils, to maintain firm working surfaces, to limit fugitive dust, and to maintain appropriate moisture conditions to protect soil resources.
5. The operator shall schedule and conduct most operations within the normal operating season. The normal operating season includes the time period that typically has suitable soil moisture and runoff conditions for most activities and operations.
6. The operator shall conduct all activities to prevent erosion and sedimentation. Temporary erosion control measures may be required to prevent, control, and mitigate erosion and sedimentation. Temporary and permanent erosion control work must be kept current with ongoing operations, especially when construction occurs outside of the normal operating season.
7. On National Forest System lands, the operator shall implement best management practices designed to mitigate non-point source water pollution in accordance with the National Best Management Practices for Water Quality Management on National Forest System Lands (USDA 2012), Forest Plan Standards and Guidelines, and applicable Forest Service directives.
8. The operator shall provide a ventilation shaft plugging plan for BLM or FS approval (as appropriate based on land status) for all shafts that intersect the D-aquifer on BLM or FS lands. This plan shall be submitted for agency approval at least 6-months prior to ventilation shaft reclamation.
9. The authorized officer of BLM or FS, as appropriate based on land status, shall be notified if a spill of a hazardous material occurs on public lands that exceeds a reportable quantity of 5 gallons. Spill containment shall be initiated immediately and contaminated material shall be moved to the nearest approved landfill or disposal facility as appropriate.
10. All equipment and debris must be removed from the Forest System or BLM lands upon completion of operations. All trash and garbage must be properly disposed of at an approved refuse area. Disposal or burial of any such materials in mud pits or other areas, or by burning, on BLM or Forest System lands is prohibited.
11. The operator shall place signs warning the public of construction equipment in areas where construction is occurring.
12. The operator shall place temporary fencing around ventilation shafts during construction when the crew is not on site. Permanent fences will be installed and maintained until the ventilation shafts are reclaimed.
13. Ventilation shaft surface infrastructure should be designed to blend in with natural surroundings to the extent practicable, and shall be limited to the minimum height necessary to facilitate proper functioning of the ventilation shaft.
14. The operator shall install gates on exploration and/or ventilation access roads if specified by the authorized officer of BLM or FS, as appropriate based on land status.



15. Removal of vegetation shall be limited to that necessary for operations and approved by the authorized officer of BLM or FS, as appropriate based on land status. Removal or trimming of trees shall be avoided whenever possible.
16. No surface-disturbing activities will occur within a 0.5 mile radius of documented Golden Eagle nest sites from January 1 to August 31 or until fledgling and dispersal of young.
17. Unless approved in advance by BLM or FS, the operator will avoid disturbance of snags (standing, dead or dying trees) during construction of exploration drilling and ventilation hole access roads and drilling sites.
18. If slash is generated from the removal of trees and brush in areas of ponderosa pine habitat, it should be scattered on the site, chipped or, if required by the size/amount of material and approved by appropriate agency, piled and burned. Burning of slash shall occur only if prior approval has been granted by the authorized officer of BLM or FS as appropriate.
19. The operator shall leave all gates within the project area as they are found (i.e., open gates will be left open, closed gates will be left closed).
20. Removal or alteration of existing range improvements is prohibited unless prior approval from the authorized officer of BLM or FS, as appropriate based on land status, is obtained.
21. All drill holes shall be plugged in accordance with Utah Division of Oil, Gas and Mining Rule R647-2-108.